ClearOne®

SALES BRIEF

PRODUCT DESCRIPTION

ClearOne's MAX tabletop conference phones deliver rich, full-duplex audio in a wide variety of conference room settings and at an affordable price. MAX phones are offered in analog wired, analog wireless, and SIP-based versions, and deliver unprecedented expansion capabilities. Instead of providing only expansion microphones, MAXAttach offers multiple linked phones, each with microphones, loudspeakers, and dial pad controls for outstanding full-room coverage. No matter where participants are seated, conversations are natural and effortless.

A single MAX phone is typically used in small- to medium-sized conference rooms, executive offices, and home offices. MAXAttach is designed for medium- to large-sized rooms and can support up to 4 total phones daisy-chained together.

COMPETITION

The MAX phones compete directly with Polycom's SoundStation phones. Since its release in 2003, we have consistently taken market share from Polycom and have become #2 in the tabletop market.

DIFFERENTIATORS

There are four main areas in which we differentiate ourselves from the competition:

- » Audio Quality and Performance
- » Room Coverage
- » Price
- » Warranty

AUDIO QUALITY AND PERFORMANCE

Every MAX phone comes with high performance audio processing technologies that are found in our professionally installed audio conferencing solutions. Customers who perform side-by-side tests are always telling us that our phones sound better than the competition.

Each MAX phone contains three microphones, providing full 360° audio pickup, and a large speaker. An audio industry leader for many years, ClearOne has developed a number of important audio processing technologies that are included in each MAX phone:

- » **Full-Duplex:** This simply means that the audio is a two-way street—call participants can both talk and listen at the same time. Many devices claim to be full-duplex but really deliver only half-duplex performance, meaning that when one participant is talking, he cannot hear anything being said from the far side without substantial audio clipping or suppression.

- » **Distributed Echo Cancellation®:** One of the biggest challenges in delivering good sound quality during a conference call is eliminating acoustical echo. Canceling echo is especially important with speaker phone devices. A telephone handset does not need echo cancellation since there is physical isolation between the microphone and the speaker. However, since a speaker phone's mic and speaker are close to each other and not isolated, the mic can pick up audio from the far side coming through the speaker and return it back to the far side, creating an echo. ClearOne's Distributed Echo Cancellation® solves this problem by identifying the echo and eliminating it. ClearOne is a pioneer in echo cancellation technology and was the first to introduce Distributed Echo Cancellation in 1998.

» **Noise Cancellation:** Most rooms contain ambient noise produced by HVAC systems, fluorescent lights, projectors, computers, etc. Noise cancellation identifies these sounds and removes them. Unlike many competitive products, ClearOne uses a digital analysis technique that discriminates the talker's voice from ambient room noise and only applies noise cancellation to the ambient room noise. This allows the audio to pass to the far side in a pristine condition.

» **First Microphone Priority (CLEAREFFECT™):** When multiple microphones are active simultaneously in a conference phone, voice signals arrive at different microphones at different times due to sound reflection from walls, ceilings or other surfaces. This causes sound distortion, which is often described as a "hollow" or "tunnel" sound. ClearOne's First Microphone Priority technology minimizes this distortion by using an intelligent voice detection method to activate only one microphone at a time based on proximity to the person speaking.

ROOM COVERAGE ("ATTACH")

One of the most important considerations when installing conference phones in a room is making sure that the room receives proper coverage. All participants should be close enough to a microphone to be heard and close enough to a loudspeaker to hear.

For a small conference room with six or eight participants, a single, high-quality conference phone should be adequate. However, for larger rooms or rooms with long or u-shaped tables, a single conference phone simply cannot provide adequate coverage—either for microphones or for loudspeakers.

Our competition's approach to this challenge is to add extension mics connected to the phone. This is only a partial solution as it only adds two more microphones. The system still has only one loudspeaker and one dial pad. This configuration cannot adequately cover a long, u-shaped, or square conference table. Where would you place the equipment so that everyone can hear and be heard? Most work-arounds (putting the phone on a stool and the mics on the tables, etc.) are kludgy at best.

A much better approach is the one offered by our MAXAttach products which daisy-chain entire phones together and spread them out across the table. The wired MAXAttach products support up to four connected units (MAX Wireless can daisy-chain two units). And this solution is still less expensive than the competition.

With MAXAttach, since every phone has three mics (with 360° pickup), a large loudspeaker, and a dial pad, units can be placed such that all participants are close to a phone. In a full four-phone MAXAttach system, users would have 12 microphones and four loudspeakers distributed throughout the room—no other product can even come close to that level of room coverage.

Whether analog or IP, MAXAttach is extremely easy to connect. The base unit contains jacks for power, the incoming phone line (either analog or Ethernet), and the connection out to the MAX phone. Each phone in the group has a 'Line In' and 'Line Out' jack—you just link from one phone to the next.

The advantage of having dial pads on each attached phone is often overlooked. But since the phones work together as a single system, any user can easily press Mute for a quick offline conversation, change the volume, dial the call, etc.

PRICE

MAX conference phones are a much better value, ranging anywhere from $100 to $350 less than the comparable Polycom product.

WARRANTY

ClearOne offers a full two-year warranty with all of our conferencing products. The competition offers only one year.

USAGE PROFILES

DEVICE	USAGE	CONNECTION
MAX EX	» Analog conference phone for small/ medium conference rooms, executive offices and home offices. » Full-duplex, echo cancellation, noise reduction, 360° mic pickup, automatic level controls, first mic priority.	Connects to analog PBX via phone line.
MAXAttach EX	» Analog conference phone for medium/ large conference rooms, training rooms, unique room configurations (long or u-shaped tables). » Expandable up to 4 total units for larger room coverage and distributed control.	Connects to analog PBX via phone line.
MAX Wireless	» Wireless analog conference phone for small/medium conference rooms, executive offices and home offices. » Full-duplex, echo cancellation, noise reduction, 360° mic pickup, automatic level controls, first mic priority.	Base unit connects to analog PBX via phone line and transmits wirelessly to phone(s).
MAXAttach Wireless	» Wireless analog conference phone for medium/large conference rooms, training rooms, unique room configurations (long or u-shaped tables). » Expandable up to 4 total units for larger room coverage and distributed control.	Base unit connects to analog PBX via phone line and transmits wirelessly to phone(s).
MAX IP	» SIP-based conference phone for small/ medium conference rooms, executive offices and home offices. » Full-duplex, echo cancellation, noise reduction, 360° mic pickup, automatic level controls, first mic priority.	Connects to SIP-enabled PBX via Ethernet cable: » Cisco Call Manager 5 » Avaya SIP Server » Nortel MCS 5100 » Asterisk » Inter-Tel » 3Com » Brekeke » And many others…
MAXAttach IP	» SIP-based conference phone for medium/large conference rooms, training rooms, unique room configurations (long or u-shaped tables). » Expandable up to 4 total units for larger room coverage and distributed control.	Connects to SIP-enabled PBX via Ethernet cable: » Cisco Call Manager 5 » Avaya SIP Server » Nortel MCS 5100 » Asterisk » Inter-Tel » 3Com » Brekeke » And many others…